

# 2021 Lean and Six Sigma Conference

Theme and Focus Areas

## **THEME: New Opportunities for a New Decade**

2020 was marked by the most disruptive event in recent history, as a global pandemic forced the adoption of innovative production, logistics, and workforce solutions. The impact of artificial intelligence, the Internet of Things, and virtual tools was unmistakable, as organizations harnessed digital technologies as they pivoted in response to both local and global restrictions.

As best practices emerge from the experiences of COVID-19, quality professionals are learning that these new methods can pay significant dividends in the new decade. Nowhere is this more evident than in the solutions offered by lean and Six Sigma practices, and at the 2021 Lean and Six Sigma conference, attendees will learn how they can harness the benefits of these methods to identify improvements, gather and respond effectively to data and create an ongoing culture of excellence through quality.

#### **FOCUS AREAS**

#### Making the Most of Data Mining and Visualization

Increasing availability of data is a leading factor in the success of many organizational quality initiatives. Beyond the tools needed to collect reliable, data, there must be a reliable strategy to analyze and visually represent the data without bias that also prompts action. Sessions in this track explore how lean and Six Sigma methods can be used more extensively to gather, examine, and apply data for continuous improvement.

- Foundational statistical analysis concepts
- Decision trees and other advanced measurement methods
- Clustering, classification, regression, and association rule learning
- Ensuring data integrity and cybersecurity best practices

#### Lean and Six Sigma in a Continuous Improvement Culture

Culture has an enormous impact on the enterprise-wide pursuit of continual improvement. By orienting a company's lean and Six Sigma practices toward its people and giving them the opportunity to sustain change, quality professionals can push past process-level improvement and realize a broader, organizational impact. These presentations provide insight into infusing culture with lean and Six Sigma elements for a successful continuous improvement initiative.

- Leadership's role in driving culture
- Strategies to gain staff input and participation
- How digitalization enhances a continuous improvement initiative
- Sustaining a culture of continuous improvement



Combining the techniques of project management with data and analysis benefits of lean and Six Sigma results in optimized performance, customer satisfaction and decision-making capabilities. Sessions in this area highlight how quality organizations can benefit from applying lean and Six Sigma methodologies to ensure greater reliability via an evidence-based approach in a variety of project management scenarios.

- Applying DMAIC to target customer needs and measure performance
- Using lean and Six Sigma to reduce operational risk
- Clarifying project objectives
- Avoiding common pitfalls of Six Sigma applications in project management

### The Quality Trinity: Lean, Six Sigma, and Quality 4.0

Organizations are seeing rapid gains in access to data, computing power, and connectivity, and aligning the disruptive technologies of Quality 4.0 with problem-solving methodologies of lean and Six Sigma can further drive improvements in business intelligence, strategic initiatives, and product and service offerings. This area of focus gives insight into building an effective lean and Six Sigma framework to accommodate Quality 4.0 and allow for an enterprise's data-driven transformation.

- Deep learning and neural networks for problem-solving enhancement
- Assessing your organization for AI readiness
- The Six Sigma-Big Data connection
- How predictive algorithms can improve automation
- The role of real-time data in process improvement